

AMENDMENTS TO THE DRAWINGS

Please amend Figs. 1-3 to include the legend "Prior Art".

Attachment:

Replacement Sheets

Annotated Sheets showing Changes

REMARKS

Claims 1-8 remain in the application with claims 1-6, and 8 having been amended hereby.

Reconsideration is respectfully requested of the objection to the drawings.

Submitted herewith are replacement sheets in which Figs. 1-3 are labeled with the legend "Prior Art".

Reconsideration is respectfully requested of the rejection of claims 1-7 under 35 USC 102(b), as being anticipated by Kubo et al.

As explained in the present specification, the present invention is intended to provide a tuner apparatus that can tune or obtain the signals from a broadcast satellite system as well as a land provided signal such as VHF and CATV without dedicated circuitry for each of the two separate kinds of signals. This is accomplished by converting the terrestrial TV signals to obtain an intermediate frequency signal that lies within the bandwidth occupied by the intermediate-frequency signals of the satellite TV broadcasting signals. This permits the same quadrature detector circuit to be employed for both of the two kinds of broadcast signals and requires only a single oscillator circuit connected thereto that has the bandwidth of the intermediate-frequency signals of the satellite television broadcasting signals. This is shown in Fig. 4 and described in the present specification, for example, in the first full paragraph of page 9 in which it is stated that the first oscillator circuit 54 selects a first oscillation frequency band so that the signals

produced thereby will fall within the occupied bandwidth of the satellite digital TV broadcasting intermediate frequency signals.

The same approach is followed in the embodiment of Fig. 5 because it is seen that the same oscillator 54 is employed therein with the mixer 53.

Kubo et al. also relates to a television tuner for common use between VHF and a broadcast satellite signals. In Kubo et al. a known system for tuning a broadcast satellite signal is combined with a so-called double super type tuner as shown in Fig. 2 to result in the composite circuit of Fig. 1. It will be noted in Fig. 1 that the two signals are switched so that only a first mixer and a local oscillator are required for the broadcast satellite but the first and second mixer are employed when tuning the terrestrial signals. As noted in Kubo et al., when the switches 12 and 13 were switched to the side of the reception of the satellite television broadcasting, a broadcast satellite intermediate frequency signal was output from terminal C. On the other hand, when the switches 12 and 13 are not switched, so as to deal with a broadcast satellite signal, the terrestrial or VHF/ UHF signals are output at terminal B. As noted in column 4, line 48, to construct both of these types of tuners as a single tuner, switching circuits 12 and 13 are provided and the first local oscillating frequency is selected.

The present invention does not require any such switching circuits because the frequency of the first local oscillator 54 is specifically chosen based on the frequency of the bandwidth occupied by the broadcast satellite signal.

Accordingly, it is respectfully submitted that claims 1-7 are not anticipated by Kubo et al.

Reconsideration is respectfully requested of the rejection of claim 8 under 35 USC 103, as being unpatentable over Kubo et al. in view of Liu.

Claim 8 depends from claim 4 which for the reasons set forth hereinabove is thought to be patentably distinct over the cited reference and for at least those very same reasons claim 8 is submitted to be patentably distinct thereover.

Claim 8 provides the further limitation relating to the mixer circuit operating as a first intermediate-frequency amplifier.

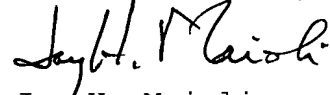
Liu relates to a method for fabricating an RF integrated circuit and shows in Fig. 1 a two stage low-noise amplifier, a mixer, and an intermediate-frequency amplifier.

Nevertheless, it is respectfully submitted that Liu does not disclose that the mixer itself becomes an amplifier and, more importantly, Liu fails to cure the deficiency of Kubo et al. in which Kubo et al. requires two switches in order to deal with the two different kinds of input signals.

Accordingly, by reason of the amendments made to the claims hereby, as well as the above remarks, it is respectfully submitted that a tuner apparatus as taught by the present invention and as recited in the amended claims, is neither shown nor suggested in the cited references, alone or in combination.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,  
COOPER & DUNHAM, LLP

A handwritten signature in cursive script, appearing to read "Jay H. Maioli".

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JHM:tb